

Appendix G

Comment Resolution Forms for Draft Remedial Design/Remedial Action Work Plan and Associated Documents

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 21, 2000

REVIEWER: DOE

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
GENERAL COMMENTS				
1	General	General	The RD/RA WP and associated documents need to be modified to reflect all the field work at TSF-26 (i.e. stockpile and wooden box bagging and placement into the RPSSA) and TSF-06 (i.e. rad survey of the overburden, removal of contaminated material greater than the FRG and placement into the RPSSA, scraping of the remaining overburden, and then rad survey of the native TSF-06 soil) that has been performed to support the post-ROD sampling	Comment Noted: The RD/RAWP will document all field work at these two sites to support post-ROD sampling and will be included in section 2.9 of the RD/RAWP. All supporting documents will reference back to Section 2.9 of the RD/RAWP.
2	General	General	Please include air modeling (CAP-88) for the soils removal at TSF-26. This site is not currently included in the modeling.	Comment Noted: Work at TSF-26 soils removal will be included in the re-run of the air modeling software CAP-88.
3	General	General	Please revise section 5.2.9, Waste Management to provide additional clarification of the definition for the AOC and the definition of onsite for waste management purposes.	Comment Incorporated: Section 5.2.9 has been revised to read as follows: "Remedial actions planned at Test Area North under the OU 1-10 Record of Decision and this RD/RAWP will generate secondary waste, including industrial, low-level, and mixed waste. These waste streams will be managed within the CERCLA Area of Contamination (AOC) associated with the corresponding remedial actions. The AOC for the TSF-06 and TSF-26 sites, for waste management purposes, is shown in Figure 5-2. Treatment, storage, and disposal facilities within the boundaries of the INEEL (e.g. WROC, RWMC, ICDF) are considered to be onsite for the purpose of CERCLA waste management.

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 21, 2000

REVIEWER: DOE

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
3 (cont.)				All waste streams generated as a result of the remedial action will be managed in accordance with the Waste Management Plan for TAN OU 1-10 Group 1 Sites Remedial Action (INEEL 2000b)."
4	General	General	Please revise the cost estimate and schedule based on current INEEL Detailed Work Plan.	Comment Incorporated: The RD/RAWP cost estimate and schedule will be modified based on the current INEEL Detailed Work Plan between the draft final and final.
5	General	General	Please modify the text where it references IDHW or DEQ to reflect the recent change to Idaho Department of Environmental Quality (IDEQ).	Comment Incorporated, the text will be modified.

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)

DATE: June 21, 2000

REVIEWER: DOE

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
6	General	General	Please revise the O&M Plan to improve the organization of Sections 3, 4, and 5 to more clearly address implementation requirements, inspection requirements, and reporting requirements for the four areas of ICs, EM, O&M, and 5-year reviews.	<p>Comment Incorporated:</p> <p>Sections 3, 4, and 5 of the document have been revised to more clearly present:</p> <p>Section 3 - A description of the requirements for institutional controls, environmental monitoring, site specific operations and maintenance, and five-year reviews.</p> <p>Section 4 - A description of operations and maintenance implementation including organization and responsibilities and requirements for conducting monitoring, maintenance, inspections, and repairs.</p> <p>Section 5 - A summary of reporting requirements for institutional controls, environmental monitoring, site specific operations and maintenance, and five-year reviews.</p> <p>Section 1 has been revise to present the above summary of the subsequent sections.</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
GENERAL COMMENTS				
1			In the OU 1-10 ROD, the Disposal Pond (TSF-07) discussion in the Description of Selected Remedies indicates that soil sampling will be performed at the pond for the same contaminants found in the TSF-05 injection well in order to support an NLCI determination for the TSF-07 surface soils. However, the RD/RA workplan does not describe any sampling to complete the task, or conversely, indicate why the task was not necessary. IDEQ/RCRA has indicated that an NLCI determination is only required for volumes of soil that are destined for disposal, and that is why NLCI sampling at TSF-07 was probably not discussed. However, an explanation is required in the appropriate section of this document explaining why this sampling will not be done, otherwise there is the appearance of non-compliance with the ROD.	The commentor is correct that an explanation is needed. A new second paragraph (above the note) will be added to Section 1.3.1.2 that states, "The OU 1-10 ROD states that no-longer contained-in (NLCI) sampling will be performed at the Disposal Pond (TSF-07). However, the IDEQ has indicated that a NLCI determination is used to remove RCRA waste codes for generated wastes. The Limited Action remedy at the Disposal Pond will not generate wastes that will require a NLCI determination for disposal. Therefore, a NLCI determination and NLCI sampling are not required for the Disposal Pond (TSF-07)."
Specific Comments				
1	Last bullet on page	P. 1-2	Please provide an estimate as to when the design drawings will be completed, i.e., will the results of the post-ROD sampling at TSF-06 Area B and TSF-26 be available in time to incorporate these results into the draft final of this document. A comment response will suffice rather than any changes to text.	The design drawings will not be incorporated into the final revision of this document. These drawings will be sent once available. The project team will provide these drawings to IDEQ and EPA as preliminary drawings for conference call discussion as soon as they are prepared. When the drawings are finalized they will be incorporated into the RD/RAWP through an INEEL Document Action Request (DAR).
2	Figure 1-2 and 1-3	P. 1-5 and 1-6	Realizing that this is a draft, please ensure in the final that the shading denoting the sites is more distinct.	Shading in Figures 1-2 and 1-3 will be darkened in future revisions of this document to ensure the contaminated areas are very distinct.

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
3	Table 1-1	P. 1-7	For the FRGs shown, indicate in a footnote which FRGs are linked to a period of institutional control.	Due to the addition of Tables 1-1 and 1-2, the original Table 1-1 is now Table 1-3. Footnote "a" will be added following 23.3 pCi/g in the rows for the Soil Contamination Area South of the Turntable (TSF-06, Area B), Disposal Pond (TSF-07), and the PM-2A Tanks (TSF-26). Footnote "a" will state, "The final remediation goal of 23.3 pCi/g for Cs-137 at this site will allow unrestricted land use in 100 years. Therefore, institutional controls will be used at this site until it is available for unrestricted land use. The WAG 1 institutional control plan (DOE-ID 2000a) will implement all institutional control requirements for WAG 1."
4	1.2.1	P. 1-7	First paragraph -- The description (dimensions) of the Soil Contamination Area in this paragraph does not concur with the shaded area shown on Figure 1-2, which depicts a rectangular area along Snake Avenue (described in the second paragraph) rather than the triangular area described in this paragraph. It is assumed the narrative is describing the total area surveyed for contamination in Area B; regardless the narrative and figure do not concur, and a suggestion would be to add additional brief text to explain the difference between the text description and figure. An alternative suggestion would be to simply put the reference to "(Figure 1-2)" into the second paragraph after the dimensions for the contaminated area. Then the dimensions and text would appear to be more in agreement.	<p>First paragraph:</p> <p>The major portion of the triangular area at TSF-06 Area B was remediated during the OU 10-06 removal action, and the remaining contamination is in a rectangular pattern along and under Snake Avenue, as indicated in Figure 1-2. However, the commentator is correct that Section 1.2.1 and the shaded area at TSF-06 Area B do not necessarily concur.</p> <p>Figure 1-2 will be revised in this RD/RAWP to indicate the triangular shape bounded by Snake Avenue on the south and formed by the former railroad track turntable on the north, the track on the east, and the road on the west will be shaded and labeled TSF-06 Area B. An additional label will be used to indicate a differently shaded area (the rectangular area currently shown as TSF-06 Area B in Figure 1-2) that is the remaining contamination at TSF-06 Area B. This shaded area will also include the section of Snake Avenue adjacent to TSF-06 Area B. It is correct that only the remaining contamination at TSF-06 Area B will be remediated.</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION:

Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)

DATE: June 9, 2000

REVIEWER: IDHW/DEO

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
4 (cont.)			<p>Second paragraph -- this paragraph would be more comprehensive if it described the "contaminated soil/overburden/contaminated soil" stratigraphy as described by BBWI personnel in the May 17th WAG-1 weekly conference call. A discussion of the complexity of the stratigraphy of the contaminated soils would amply illustrate the need for the planned detailed surveys and verification sampling. Also, there is no reference to Snake Avenue or its potential removal, verification sampling, and replacement as part of the RA. This should be included here, and in other sections of the text where warranted.</p> <p>Third paragraph -- The final remediation goal (FRG) appears, from the narrative, to be 2.3 pCi/g which will negate the need for ICs, but is not consistent with the ROD. If so, then an explanation should be added as a footnote in Table I-1 to qualify the apparent discrepancy between the text and Table. Also, please explain how this level will be detected (i.e. for the soil samples collected, what will be the detection limit and what will be the length (counting period) of the test or analysis).</p>	<p>Second paragraph:</p> <p>At the end of the second paragraph, (which is now after the third sentence) the following sentences will be added, "This additional soil, added in 1992, is referred to as the TSF-06 overburden, and the underlying contaminated soil is referred to as the TSF-06 native soil. Since 1992, the TSF-06 overburden has been contaminated with Cs-137 by windblown contamination from stockpiles at the PM-2A Tanks site (Section 1.2.3). Post-ROD sampling was performed on the TSF-06 overburden to identify the contaminated area. In order to complete post-ROD sampling, the TSF-06 overburden was removed; soil greater than the FRG was placed in soil bags for disposal and soil less than the FRG was stockpiled separately. Section 2.9.1 further explains the sampling and removal of TSF-06 overburden. Post-ROD radiological sampling of the TSF-06 native soil further identified areas that are greater than the 23.3 pCi/g Cs-137 FRG."</p> <p>Information regarding the potential contamination under Snake Avenue and it's planned removal and sampling will be added to the third paragraph.</p> <p>Third paragraph:</p> <p>The FRG of 2.3 pCi/g for TSF-06 Area B that is in this section of the RD/RAWP (and is also in the FSP) are incorrect and will be modified to 23.3 pCi/g. Through post-ROD sampling at TSF-06, it is believed that 2.3 pCi/g can not be achieved to preclude the use of institutional controls. Therefore, the FRG for TSF-06 Area B, as stated in the ROD, is 23.3 pCi/g, and institutional controls will be required.</p> <p>The third sentence in the paragraph will be changed to, "Contaminated soil exceeding the Cs-137 FRG of 23.3 pCi/g will be excavated to a maximum depth of 3 m (10 ft) bgs."</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
4 (cont.)				To add information about possible contamination under Snake Avenue, and the Snake Avenue removal, new sentences will be added after the revised second sentence (above), which state, "Cesium-137 contaminated soil is suspected to extend underneath Snake Avenue. The TSF-06 remedial action will include removing the Snake Avenue asphalt, sampling the underlying soils for Cs-137, and excavating soils exceeding the Cs-137 FRG of 23.3 pCi/g under Snake Avenue, to a maximum depth of 3 m (10 ft) bgs."
5	1.2.4 Last paragraph	P. 1-9	Please note that the statement in the next to last sentence, "... no excavation will be performed at the Fuel Leak site.", is dependent on the review of the RBCA analysis in Appendix G. This statement, here and elsewhere in this draft, may be subject to revision in the draft final based on the Appendix G review and subsequent, if any, changes required.	The commentor is correct that it is not yet finalized whether the Fuel Leak site will not require remedial action. However, after conversations with DEQ RBCA personnel, the project team believes the RBCA model is accurate and that it verifies the site does not require remedial action. No changes were made to the text.
6	1.3.1.1	P. 1-10	Please make the information provided here concerning the FRG consistent with the information provided in Table 1-1, or, as suggested in previous comments, footnoting the table.	The third sentence will be revised to, "Excavation will involve removal of soils above 23.3 pCi/g Cs-137 to a maximum depth of 3 m (10 ft), and includes contaminated soil that may be identified under Snake Avenue as part of the TSF-06, Area B remedial action."
7	2.2.2 Second bullet	P. 2-2	This statement is consistent with the Section 1.3.1.1 discussion, but is not consistent with Table 1-1. Please consider changes as noted in previous comments.	The second bullet will be revised to, "Excavation of contaminated soil exceeding the 23.3 pCi/g Cs-137 FRG, and storage of the waste in a CERCLA Storage Area until shipment to the disposal facility" The last bullet will be revised to, "Institutional controls will be required based upon the results of confirmation sampling at the completion of the remedial action."
8	2.6 Number 3	P. 2-4	A HWD should determine "where" waste generated from a remedial action will be disposed, not "when" the waste will be disposed.. If there is agreement, please change.	The second sentence in Item #3 was revised as suggested to, "This will determine where waste generated from the remedial action will be disposed."

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
9	3.4.2	P. 3-2	<p>Portions of this discussion are not clear. A suggested revision of the fifth sentence would be; "Where confirmation sampling of the excavated areas indicates that contamination greater than the FRG remains below the 3 foot depth, these areas will be backfilled with 0.5 feet of clean native fill, compacted, and reseeded, pending additional work during the Group II remedial action." Is the addition of a small amount of soil where contamination is still present after the excavation being done to reduce any more windblown contamination, and what will be the fate of these areas during the Group II work?</p> <p>Also, it is not clear as to how this will impact the tank vicinity surface area. Reading this section literally, it appears that a depression will result that could facilitate infiltration down and around the PM-2A tanks through an area of potential soil contamination. Please elaborate on this.</p>	<p>The fifth sentence was revised for clarity, and now states, "Where confirmation sampling of the excavated areas indicates that contamination greater than the FRG remains below 3 m (10 ft) from surrounding land surface elevation, these areas will be backfilled with 0.15 m (0.5 ft) of clean native fill, pending additional excavation or backfilling during the Group 2 remedial action."</p> <p>The commentor is correct that this small amount of soil will be placed over remaining contaminated soil to prevent further windblown contamination. This small amount of fill will be excavated during the Group 2 remedial action and will be considered contaminated.</p> <p>A column of Cs-137 soil contamination is already known to exist to at least 17 ft with Cs-137 concentrations that are above the FRG of 23.3 pCi/g but that do not pose a risk to groundwater. The infiltration may drive the contaminated soil column somewhat deeper, however, institutional controls will be needed at this site and preventing this infiltration is not necessary.</p>
10	Table 4-4 (ARARs)	P. 4-12	<p>Table 4-4 lists "Tank Closure and Post Closure Care" (40 CFR 264.197(a)) with a footnote. The footnote states "This ARAR will not be applicable if a no-longer contained in determination is approved by IDHW for the site." However, there is no plan to sample to the depths necessary to completely evaluate potential releases from the tank. The HWMA/RCRA tanks closure care is applicable and sampling must be performed along the sidewalls and/or beneath the tanks to evaluate potential releases from the tanks. As any actions such as this will be more appropriately associated with the Group II sites Work Plan, this issue is not necessarily relevant for Group I, but needs to be resolved prior to the issuance of the Group II draft RD/RA workplan.</p>	<p>This ARAR will have footnote "b" removed and a footnote "c" will be added following "Tank Closure and Post Closure Care". Footnote "c" will state, "The compliance strategy for this ARAR will be addressed in the OU 1-10 Group 2 RD/RAWP." Also, the compliance strategy for this ARAR will be deleted and N/A will be placed in this column.</p>
11	Figure 5-1	P. 5-3	<p>The start and finish for line 49 represents only 22 days for comment resolution and incorporation for a primary document, less than half the time provided in the FFA/CO. If this figure is meant to represent a working schedule, it should be stated in the title.</p>	<p>This figure was meant to represent a working schedule for this Group I RD/RAWP. An updated schedule will be provided in the draft final revision of this document with project working schedules for post-ROD sampling (completed), preparation of this RD/RAWP (in progress), and the remedial action.</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION:

Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
12	Table 5-1	P. 5-4	The time frames for the Remedial Design steps in this table do not concur entirely with the time frames shown in Figure 5-1, and are not entirely consistent with this being a primary document. Please explain.	This table shows the enforceable date of the Draft submittal of this RD/RAWP and the associated FF/CO review periods, which are different than the project working schedule shown in Figure 5-1. This table will also be updated in the draft final revision of this document.
13	Appendix D	P. D-1 to D-2	<p>The following are specific comments associated with this appendix:</p> <ol style="list-style-type: none"> Page D-1, fourth paragraph: The assumption is made that organic contaminants would not migrate via the air pathway. This is incorrect since organic contaminants can migrate by evaporation or coalescing with particulate matter that becomes airborne. Attachment D1, page D1-1, second assumption: The average percentage of silt in the applicable soil is cited as 4.7%. Please indicate how this information was determined. Attachment D-1, page D1-1, Table D1-1: The average vehicle weight was determined with the exclusion of the 14 dump trucks. Indicate what assumption was made to exclude the dump trucks from the overall average weight. 	<ol style="list-style-type: none"> This paragraph has been revised as follows: "The contaminant of concern (COC) for the TSF-06 and TSF-26 site is Cs-137, as identified in the OU 1-10 Remedial Investigation/Feasibility study. The maximum concentration as reported in the RI/FS is 150 pCi/g at the TSF-06 site and 4400 pCi/g from the TSF-26 site. These activities were used to estimate emissions for both Cs-137 and its daughter Ba-137m. Based on process knowledge, the PM-2A Tanks received waste that contained trichloroethene, 1,1,1-trichloroethane, and carbon tetrachloride. These constituents were sampled for and analyzed during the port-ROD sampling at the TSF-26 stockpiles and wooden box. All three of these constituents were non-detect and therefore, only the radionuclide/particulate emissions were modeled for these sites. Based upon samples previously taken at TAN, the average silt percentage is 8.07% and this revised number will be used in the CAP-88 model. The dump trucks will be eliminated from the model re-run due to the fact that the dump trucks will not enter the exclusion zone and will not drive over the contaminated soil.

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
13 (cont.)			<p>4. Attachment D-1, page D1-2: The section of AP-42 utilized for calculating emissions from unpaved roads that was utilized in the calculations was dated 01/95 and 01/96. The most recent revision, dated 09/98, should be utilized. The emission factor, E, is determined by the following equation:</p> $E = \frac{k(s/12)^a (W/3)^b}{(M/0.2)^c}$ <p>where k, a, b, and c are particle size specific.</p> <p>5. Attachment D2: In order to reproduce the CAP88-PC modeling calculations, additional input parameters such as Run Options, Source Data, and Ag Data should be included. In addition to this information, the met data (WNDFILES) for Test Area North should also be included.</p>	<p>4. The most recent AP-42 equation will be used..</p> <p>5. All input screen printouts will be provided in the Draft Final revision of this document.</p>
14	Appendix G	P. G1-7 to G1-8	<p>WRTTF-13 Post-ROD Sampling Data and RBCA Analysis</p> <p>Based on the results of the RBCA analysis in Appendix G, DOE states elsewhere in the document (see Specific Comment 5) that "no excavation will be performed at the Fuel Leak site. However, in reviewing the RBCA print-outs in Appendix G, the following problems associated with the analysis were found:</p> <p>On Page G1-7, <i>Complete Pathway(s) and Route(s) of Exposure</i>, it is indicated in the "Protection of Groundwater" category that the groundwater is a class 2. This is not correct. Groundwater in the Snake River Plain aquifer is a Class 1 groundwater.</p>	<p>Groundwater class 2 was chosen for the model based upon significant INEEL groundwater modeling experience. Groundwater class 2 flow is at a rate of approximately 1 ft/day. Actual Snake River Plain Aquifer flow at the INEEL is known to be approximately 4.5 ft/day. Groundwater class 2 is a more conservative assumption to use than the true known flow rate. In the June 27, 2000 conference call with Mr. Bruce Wicherski of IDEQ, the groundwater class 2 assumption was discussed and agreed to be acceptable for use in the Appendix G RBCA model.</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
14 (cont.)			<p>On Page G1-8, <i>Exposure Parameters for Routes of Exposure</i>, the "Exposure Frequency" for the days of exposure per year were cut to 180 days which it states are the Tier 1 default parameters. This is incorrect. Table 6-1 of the Idaho RBCA manual provides "350 days" for a Tier 1 default for the exposure frequency.</p> <p>It is recommended that the parameters that were used be reviewed, and the model be rerun with the suggested changes and submitted again for DEQ review.</p>	<p>The commentor is correct that Table 6-1 of the Idaho RBCA manual provides 350 days for a Tier 1 default for the exposure frequency for surficial soil. However, the Idaho RBCA model uses 180 days for a Tier 1 default for the exposure frequency for surficial soil. It was confirmed with Mr. Bruce Wicherski of IDEQ during the June 27, 2000 conference call that 180 days for a residential scenario, and 40 days for a commercial scenario are the correct numbers for surficial soil.</p> <p>No changes were made to the RBCA model. The June 27, 2000 conference call with Mr. Bruce Wicherski of IDEQ provided guidance on several aspects of textual explanation provided as page G-1 in Appendix G. This page will be revised for the draft final revision of this RD/RAWP.</p>

Field Sampling Plan

15	General		<p>Discuss the fact that there appears to be no discussion of the sampling or analyses for the portion of Snake Avenue adjacent to TSF-06 that will be surveyed for contamination. This omission was also noted in the RD/RA Workplan. This discussion would be pertinent to several sections of this document, as in the RD/RA Workplan.</p>	<p>This FSP primarily addresses confirmation sampling at TSF-06 Area B, and also that portion of TSF-06 that extends underneath Snake Avenue. Please note in Table 3-1 that soil sampling underneath Snake Avenue is discussed and is included with the TSF-06 Area B site. The commentor is correct that information regarding pre-excavation sampling is not included in this FSP, and should be included to identify areas underneath Snake Avenue that exceed the FRG.</p> <p>A new first paragraph will be added to Section 1.1.1 that states, "Pre-excavation sampling underneath Snake Avenue will be conducted during the remedial action to determine the extent of contamination and the volume requiring excavation. Sampling will be conducted after the removal of the Snake Avenue asphalt adjacent to TSF-06 Area B. The asphalt will be scanned by radiological control (RADCON) personnel to determine whether it is contaminated. The Cs-137 contaminated soil underneath the asphalt will be located and delineated using a 3-step sampling approach to identify areas with Cs-137 concentrations greater than the final remediation goal (FRG) of 23.3 pCi/g. The first two sampling steps</p>
----	---------	--	---	--



PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION:

Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)

DATE: June 9, 2000

REVIEWER: IDHW/DEO

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
15 (cont.)				<p>involve the use of field screening instruments, described in detail later in this document. Biased samples (determined from the results of the first two field screening sampling steps) will be taken and submitted for a 20-minute gamma spectrometric analysis to identify areas requiring excavation."</p> <p>A new row will be added to Table 3-1, similar to the first row in Table 3-1 from the OU 1-10 post-ROD FSP that lists the data quality objectives for the 3-step sampling that will be conducted underneath the Snake Avenue asphalt.</p> <p>Section 4.2.1 will be revised and divided into two subsections, Section 4.2.1.1 titled "Pre-excavation Soil Sampling Under Snake Avenue" and Section 4.2.1.2 titled "Confirmation Sampling". The opening paragraph of Section 4.2.1 will be changed to, "Two types of sampling will be conducted at the Soil Contamination Area South of the Turntable (TSF-06 Area B): (1) pre-excavation soil sampling under Snake Avenue, and (2) confirmation sampling following removal of contaminated soil, including underneath Snake Avenue. The following sections detail the remedial action sampling activities that will be conducted for the Soil Contamination Area South of the Turntable (TSF-06 Area B)." The new Section 4.2.1.1 will be modeled after Section 4.2.1.1 in the post-ROD FSP since this is the same sampling methodology that will be used. The new Section 4.2.1.2 will contain the information that is currently in Section 4.2.1.</p> <p>The sampling and analysis plan tables that are in Appendix A will include additional sample locations for the pre-excavation sampling under the Snake Avenue asphalt.</p> <p>In addition, more text will be included throughout the document that makes it very clear that confirmation sampling will be performed for both TSF-06 Area B and the soil underneath Snake Avenue.</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
16	General		It is assumed that the field screening and soil sampling described throughout this document, such as in Section 6.0 for example, is for verification or confirmation of the Remedial Action meeting the FRG. However, the narratives on this point are not always clear, and a minimal addition of text explanation would help at times in explaining exactly what will be accomplished by work such as field screening or soil sampling.	The three objectives of the FSP are: (1) determine areas underneath Snake Avenue that require excavation to meet the 23.3 pCi/g Cs-137 FRG, (2) verify remedial action excavation met the FRG of 23.3 pCi/g Cs-137 at TSF-06 Area B, including underneath the Snake Avenue asphalt, and (3) verify remedial action excavation met the FRG of 23.3 pCi/g Cs-137 at TSF-26 in the Group 1 excavation to a maximum depth of 3 m (10 ft) below surrounding land surface (remainder of TSF-26 will be addressed in Group 2 remedial action). All sampling will be performed for Cs-137 and will use field screening to identify the "hottest" areas, or areas with the most Cs-137 contamination, prior to taking a physical sample. This information will be included in Section 1.1 and will also be incorporated throughout the document to ensure the purpose of the sampling is very clear.
17	1.1.4	P. 1-2	The Fuel Leak site <i>may</i> not require RD/RA sampling, but that is conditional based on the final version of the RBCA modeling (Appendix G of the Workplan) for this site, which continues to be under review.	<p>The commentor is correct that it is not yet finalized whether the Fuel Leak site will not require remedial action and subsequent RD/RA confirmation sampling. However, after conversations with DEQ RBCA personnel, the project team believes the RBCA model is accurate and that it verifies the site does not require remedial action and subsequent RD/RA confirmation sampling.</p> <p>Section 1.1.4 will be modified to state, "The Fuel Leak site (WRRTF-13) will not require RD/RA sampling because site concentrations are below risk-based levels determined from the State of Idaho Risk Based Corrective Action (RBCA) guidance. Details of the RBCA analysis are further discussed in Appendix G of the Group 1 Remedial Design/Remedial Action Work Plan (RD/RAWP) (DOE-ID 2000). Therefore, the Fuel Leak site (WRRTF-13) will not be addressed further in this FSP."</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
18	2.1.1	P. 2-4	The comments for this section are the same as can be found for Specific Comment 4 of the RD/RA Workplan. Briefly, the narrative describing the contaminated areas and the corresponding areas on Figure 2-3 do not necessarily concur; the discussion appears to infer that the apparent site boundaries are the same as the area of contamination to be remediated, but Figure 2-3 indicates a rectangular (shading) area to be remediated.	<p>The major portion of the triangular area at TSF-06 Area B was remediated during the OU 10-06 removal action, and the remaining contamination is in a rectangular pattern along and under Snake Avenue, as indicated in Figure 2-3. However, the commentor is correct that Section 2.1.1 and the shaded area at TSF-06 Area B do not necessarily concur.</p> <p>Figure 2-3 will be revised in this FSP to indicate the triangular shape bounded by Snake Avenue on the south and formed by the former railroad track turntable on the north, the track on the east, and the road on the west will be shaded and labeled TSF-06 Area B. An additional label will be used to indicate a differently shaded area (the rectangular area currently shown as TSF-06 Area B in Figure 2-3) that is the remaining contamination at TSF-06 Area B. This shaded area will also include the section of Snake Avenue adjacent to TSF-06 Area B. It is correct that only the remaining contamination at TSF-06 Area B will be remediated.</p>
19	2.3.1 Second Paragraph	P. 2-7	The last part of the first sentence, "which includes potentially underneath the adjacent road, Snake Avenue." is not clear and needs to be revised.	<p>The dimensions given address both the TSF-06 Area B contamination and the potential contamination that may exist in the soil under Snake Avenue.</p> <p>This sentence, which is now moved up into the end of the first paragraph of Section 2.3.1, will be revised to, "Although previous removal actions were executed in the Soil Contamination Area South of the Turntable under OU 10-06, Cs-137 contamination remains within an approximately 30.5- by 152-m (100- by 500-ft) area, which includes potentially contaminated soil underneath the adjacent Snake Avenue."</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
20	2.3.2 Second Paragraph	P. 2-8	The significance of the depth of 0-2ft for the "remaining surface soils" is not understood. The depth in the WP to be potentially remediated is consistently referred to as approximately 0 to 3ft bgs. Please clarify.	This paragraph does not adequately address the current nature and extent of contamination at TSF-26, which is the intent of this section. Therefore, this paragraph will be revised to, "Contaminated soil was removed at the PM-2A Tanks in 1996 as part of the OU 10-06 removal action. Three soil stockpiles and the wooden box remained at the PM-2A Tanks site following the OU 10-06 removal action. During OU 1-10 post-ROD sampling conducted in March and April 2000 at the PM-2A Tanks, it was determined these stockpiles and wooden box created an occupational hazard to TAN workers due to windblown spread of contamination. The stockpiles and wooden box were placed in soil bags to eliminate the possibility of windblown contamination. The soil bags were moved to a CERCLA Storage Area at the Radioactive Parts Security Storage Area (RPSSA), which is within the AOC for both TSF-26 and TSF-06. Post-ROD radiological sampling further identified areas within the PM-2A Tanks site that are greater than the 23.3 pCi/g Cs-137 FRG. Further information about the post-ROD sampling activities are described in Section 2.9 of the Group 1 Remedial Design/Remedial Action Work Plan (RD/RAWP) (DOE-ID 2000)."
Operations And Maintenance Plan				
21	3.1, fifth sentence	3-1	The last part of the sentence, "... hypothetical current or future residential scenario" should be changed to "... hypothetical current <i>industrial</i> or future residential scenario".	<p>Institutional control determinations in the OU 1-10 Record of Decision were based upon risk less than 1E-04 for current and future industrial scenarios, and also for current and future residential scenario. Although it is understood that DOE will manage the land use at the INEEL for the next 100 years, this in itself is a form of institutional control, by restricting the land use to industrial. Therefore, institutional control determinations also considered current residential scenarios.</p> <p>This sentence will be changed to, "Institutional controls will not be required if all contaminated media are removed to basalt, if contamination concentrations are comparable to local background values, or if residual concentrations are less than or equal to a 1E-04 risk-based soil concentration for a hypothetical current or future residential scenario, or current or future industrial scenario (DOE-ID 1999)."</p>

PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
22	3.2, fourth sentence	3-1	Please explain the significance of the year 2071 in terms of the year sampling is to be performed to determine if the Disposal Pond can be released for unrestricted land use.	<p>The average concentration used in the RI/FS to evaluate the Disposal Pond (TSF-07) site was 14.5 pCi/g. The samples from the site were taken from 1988 to 1991. The Cs-137 concentrations in the Disposal Pond will decay to acceptable levels for unrestricted land use (2.3 pCi/g) in 80 years. Since the last samples were taken in 1991, 80 years from 1991 is the year 2071. Therefore, the average concentrations in the Disposal Pond are expected to decay to 2.3 pCi/g by the year 2071. The sampling that is described for year 2071 will confirm that the site is available for unrestricted land use, and that the limited action was successful.</p> <p>The sentence will be revised to, "Selected sampling will be performed at the Disposal Pond in Year 2071 (date when average concentrations for Cs-137 are expected to decay to 2.3 pCi/g for unrestricted land use) to determine if the site can be released for unrestricted land use."</p>
23	5.1	5-1	There appears to be a lack of specificity in this section, and the following sections, under "Reporting Requirements". Rather than go into detail on this, refer to for example the equivalent sections in the O&M Plan for TRA, OU 2-13, specifically Section 4. Inspection and Maintenance. In this section can be found "Table 4-2 Summary of the OU2-13 inspection schedules". This table summarizes both the inspections (what will be inspected) and the frequency per the specific inspections. This example of specificity is more informative than what is presented in the OU 1-10 O & M Plan.	Section 5.1 is intended to provide the reporting requirements for inspection activities and should not include information about the frequency or type of inspections. Rather, Section 4.2.1 should contain this information. Therefore, to revise Section 5.1, the first two paragraphs will be moved and placed in Section 4.2.1 and the revised Section 5.1 will contain only the last paragraph of the section, which discusses the inspection reporting requirements. Table 4-1 was modeled after the OU 2-13 O&M Plan and is designed to give the inspection schedule for OU 1-10 sites.
Waste Management Plan				
24	3.1.1 Last paragraph	3-2	The discussion for TSF-06 Area B (specifically sentence 3 of this paragraph) is not consistent with the RD/RA Workplan nor the Field Sampling Plan in that there is no reference to an FRG of 2.3pCi/g as a clean-up goal that will preclude the use of institutional controls at this site. Please change or explain why this is different.	<p>The FRG of 2.3 pCi/g for TSF-06 Area B that was in the RD/RAWP and FSP were incorrect and will be modified to 23.3 pCi/g. Through post-ROD sampling at TSF-06, it is believed that 2.3 pCi/g could not be achieved to preclude the use of institutional controls. Therefore, the FRG for TSF-06 Area B, as stated in the ROD, is 23.3 pCi/g, and institutional controls will be required.</p> <p>No text was modified.</p>



PROJECT DOCUMENT REVIEW RECORD

DOCUMENT TITLE/DESCRIPTION: *Comprehensive Remedial Design/Remedial Action Work Plan for the Test Area North, Operable Unit 1-10, Group 1 Sites (Draft), Field Sampling Plan for Remedial Design/Remedial Action Sampling and Field Screening of Group 1 Sites at Waste Area Group 1, Operable Unit 1-10 (Draft), Operations and Maintenance Plan for Test Area North, Operable Unit 1-10 (Draft), Waste Management Plan for the Test Area North, Operable Unit 1-10 Group 1 Sites Remedial Action (Draft)*

DATE: June 9, 2000

REVIEWER: IDHW/DEQ

ITEM NUMBER	SECTION NUMBER	PAGE NUMBER	COMMENT	RESOLUTION
25	3.1.4	3-3 and 3-4	This discussion is very comprehensive in that it presents a complete picture of the work that may occur at WRRTF-13, including the potential excavation and land farming of the diesel contaminated soils, and subsequent confirmation sampling. However, the last paragraph of this section on page 3-4 should state that the sampling and excavation <i>may</i> not be required based on the results of the RBCA evaluation. The outcome of that evaluation is still pending the review of Appendix G of the draft RD/RA Workplan.	All text in Section 3.1.4 will be deleted except the last paragraph.